Application No.:

10/719,006

Filing Date.:

November 20, 2003

LISTING OF CLAIMS

1-23. (Canceled)

24. (Currently Amended) A method for producing a human antibody, said method comprising:

- (a) introducing a first polynucleotide into a first mammalian myeloma cell, wherein the first polynucleotide comprises a first amplifiable marker and a sequence encoding a heavy chain polypeptide of a human antibody;
- (b) introducing a second polynucleotide into a second mammalian myeloma cell, wherein the second polynucleotide comprises a second amplifiable marker and a sequence encoding a light chain polypeptide of said human antibody;
- (c) culturing each of said first and second mammalian myeloma cells separately in the presence of an amplification agent, wherein the first and second amplifiable markers are the same; and
- (d) fusing the cultured cells produced by steps (a)-(c) to form a hybrid cell, wherein the hybrid cell expresses said human antibody;

wherein the first cell expresses an irrelevant light chain and expresses the heavy chain prior to fusion with the second cell.

- 25. (Previously presented) The method of claim 24, further comprising:
- (e) recovering the human antibody from the hybrid cell.
- 26. (Canceled)
- 27. (Previously presented) The method of claim 24, wherein the first cell and second cell are NS0 cells.
- 28. (Previously presented) The method of claim 24, wherein the first and second amplifiable markers are each dihydrofolate reductase (DHFR), glutamine synthase, or adenosine deaminase.

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29. (Currently Amended) A method for producing a human antibody, said method comprising:

(a) culturing a first recombinant mammalian myeloma cell in the presence of a first amplification agent to produce a first amplified recombinant cell;

wherein the first cell comprises a first polynucleotide comprising a first amplifiable marker and a sequence encoding a heavy chain polypeptide of a human antibody,

(b) culturing a second recombinant mammalian myeloma cell in the presence of a second amplification agent to produce a second amplified recombinant cell;

wherein the second cell comprises a second polynucleotide comprising a second amplifiable marker and a sequence encoding a light chain polypeptide of said human antibody, wherein the first and second amplifiable markers are the same; and

(c) fusing the first and second amplified recombinant mammalian myeloma cells to form a hybrid cell, wherein the hybrid cell expresses a said human antibody;

wherein said human antibody is produced, and wherein the first cell expresses an irrelevant light chain and expresses the heavy chain prior to fusion with the second cell.

- 30. (Previously presented) The method of claim 29, further comprising:
- (d) recovering the antibody from the hybrid cell.
- 31. (Previously presented) The method of claim 29, wherein the first cell and second cell are NS0 cells.
- 32. (Previously presented) The method of claim 29, wherein the polynucleotide encoding the heavy chain polypeptide and the polynucleotide encoding the light chain polypeptide are obtained from a B-cell or a hybridoma cell, wherein said B-cell or hybridoma cell produce an antibody.
 - 33. (Canceled)

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34. (Previously presented) The method of claim 29, wherein the first cell expressing the desired heavy chain is selected for one or more desirable characteristics prior to said fusing.

35. (Previously presented) The method of claim 29, wherein the second cell expressing the desired light chain is selected for one or more desirable characteristics prior to said fusing.

36. (Previously presented) The method of claim 34, wherein said desirable characteristic is a high production rate of the heavy chain.

37. (Previously presented) The method of claim 35, wherein said desirable characteristic is a high production rate of the light chain.

38. (Previously presented) The method of claim 29, wherein the first and second amplifiable markers are each dihydrofolate reductase (DHFR), glutamine synthase (GS), or adenosine deaminase.